

RELATIONSHIPS AMONG SOCIAL CLASS  
MEMBERSHIP, ATHLETIC PARTICIPATION,  
OTHER VARIABLES, AND SOCIAL MOBILITY

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## CHAPTER I

### INTRODUCTION

During recent decades educators have been made increasingly aware both of the existence of social class structures in our communities and of their effects upon the schools. Numerous sociological studies of the composition and characteristics of social classes have been reported. Also, many studies have been made which show the presence of social-class-inspired bias against lower class children in the conduct of our schools. While the school system generally is credited with being an important social agency for upward social mobility, it is also usually conceded that this mobility has generally been gained by the middle class rather than by the lower class children. In fact, there is some reason to believe that ordinary school practices may even re-enforce for the lowest class child a resistance to upward mobility.

Greater awareness of this situation has not, of itself, made teachers able to cope adequately with it. No doubt, progress has been made in teachers' attitudes toward, and understanding of, lower class children. Doubtless also, some school practices have changed to help eliminate the more obvious biases which have existed. But, it is

probably safe to say that teachers generally are more conscious of their difficulties due to social stratification than they are of satisfactory ways of dealing with them. This position may be so common that psychologically many teachers may attempt to pretend things are better than they are and grasp at straws to hide from view subtle biases which still exist.

Such may be the situation with regard to a rather common notion that school athletics is a route toward social mobility and that lower class boys may have equal, or perhaps even favored, access to that route. School athletics are sometimes defended on the ground of their school holding power particularly for the lower class boys. And, every school can probably point with pride to some boy who has risen to a higher social status because of a successful athletic career in school.

Now, if school athletics is a route where the usual social biases are not at work against the lower classes, or if the biases exist but are generally overcome, then it would be extremely interesting and useful to know why either is so. For perhaps the conditions shown to exist making one or the other of these two situations possible in athletics might then be established in other areas of the curriculum. On the other hand, if it can be shown that school athletics is neither free of bias nor are these biases often overcome, a straw supporting a will to believe in more equality of opportunity than actually is

present in one program in our schools can be blown away. A more realistic assessment might not be comforting, but, hopefully, it might strengthen teachers' resolve to find more adequate solutions to the difficulties created by social class memberships of the children they confront. Furthermore, even if bias is shown to exist and yet it can be demonstrated that some lower class boys overcome it in athletics, then perhaps some clues can be found to help others surmount the bias here and in alternative routes toward social mobility provided in the schools.

It is from some such thoughts as these that the present study originated. It is a study of the relationships between social class membership and athletic participation in a selected south Florida junior high school and the senior high school which its graduates attend. It is an inquiry intended to help test the validity of the claim of equal or favored opportunity for lower class mobility as a result of an equal or favored opportunity for participation in school athletics. And, it is a search for clues or suggestions to aid teachers in their struggles with the difficulties caused by social stratification.

## CHAPTER II

### BACKGROUND OF THE STUDY

It would be unusual to have grown up in the United States without having listened more than once to fellow Americans tell with pride of the "rags to riches" successes of a number of our countrymen. Several of these stories invariably are told about well-known sports figures who are said to have risen from the humblest beginnings to financial security and national prominence by virtue of their athletic skills or coaching abilities. Because some of these sports stories are accurate and because all such stories seem to get many enthusiastic repeatings, accurate or not, a rather general impression has grown up in this country suggesting that athletics is a heavily traveled route toward economic comfort and prestige by the less fortunate of this nation. Indeed, there are those who would go farther and suggest that competitive athletics as an activity and as a route "up" ". . . seem to be the priority of the lower socioeconomic classes."<sup>1</sup>

The eagerness with which many of our citizens repeat any kind of American success story probably is best

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<sup>1</sup>William J. Fitzpatrick, "Competitive Sports and Social Caste," Clearing House, XXXIV (May, 1960), 526.



explained as inspired by patriotism. Their image of the United States seems to be one of a land of opportunities which are equally available to all its people, and it is this image which they apparently wish to re-enforce by recalling for listeners the childhood poverty of some one or another of our nation's wealthiest and most respected citizens.

Many who would perpetuate this national image of equality of opportunity, ". . .when they first become acquainted with the idea of social classes, tend to deny their existence in America because they feel they are undemocratic,"<sup>1</sup> that they are a denial of our equality. They seem not to notice the contradiction they themselves raise with their "success story" descriptions of the difficulties encountered by some of our nation's "low born" in their climb toward positions which others inherited. They seem not to realize that "the democratic ideal of equality of opportunity means in our society opportunity to rise in the social scale. It does not, however, deny the fact that the scale exists."<sup>2</sup> The truth is America does have a social class system, as indeed all modern societies do.<sup>3</sup> It is well argued that

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<sup>1</sup>Robert J. Havighurst and Bernice L. Neugarten, Society and Education (Boston: Allyn and Bacon, 1962), p. 11.

<sup>2</sup>Ibid., p. 13.

<sup>3</sup>Ibid., p. 11.

We Americans. . . have a complex highly diverse society. We. . . possess an elaborate division of labor and a ramified technology. And we. . . possess a variety of rank orders built on the need of maintaining unity and cohesion in making our common enterprises successful. Men occupying high and low positions possess families. Their families and their activities are identified with their social position. Families of the same position tend to associate together. They do this informally or through cliques, associations, or other institutions. This social matrix provides the structure of our class system.<sup>1</sup>

### The Existence of a Social Class System

The documentation of the existence of a social class system in America and the impression that we should not decrease<sup>2</sup> but should probably increase the equality of opportunity to rise within the system follows from reading the results of investigations into the lives of the people of a New England "Yankee City,"<sup>3</sup> of a Midwestern "Elmtown"<sup>4</sup> or "Jonesville,"<sup>5</sup> and of a "Deep South" "Old City."<sup>6</sup> These studies and others conducted in different

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<sup>1</sup>W. Lloyd Warner (with Marchia Meeker and Kenneth Bells), Social Class in America (New York: Harper & Brothers, 1960), p. 10.

<sup>2</sup>Havighurst, op. cit., p. 66.

<sup>3</sup>W. Lloyd Warner and Paul S. Lunt, The Social Life of a Modern Community, Vol. I, "Yankee City Series" (New Haven: Yale University Press, 1941).

<sup>4</sup>August B. Hollingshead, Elmtown's Youth: Impact of Social Classes on Adolescents (New York: John Wiley and Sons, 1949).

<sup>5</sup>W. Lloyd Warner and Associates, Democracy in Jonesville (New York: Harper & Brothers, 1949).

<sup>6</sup>Allison Davis, Burleigh B. Gardner, and Mary R. Gardner, Deep South (Chicago: University of Chicago Press, 1941).

parts of the land in cities, towns, and suburbs have consistently reported the existence of "rank orders" of people living in the same general area but with each individual associating almost exclusively within his own particular group. Those of a given rank have usually been clearly aware of the identity of the members of their own group, their group's position in the community, and aware also of the number and location of the other groups about them and the identity of their members. Each group has been found to have a clear idea of what its members hold in common (value) -- which establishes them as a distinct group in the first place -- and they also know rather accurately what is different about the values of the other groups around them. Such studies as these have shown there to be some movement (social mobility) by individuals both upward to higher ranking groups and downward to lower ranks. But, the "upward" rate of movement has been found to be slow, the rules for mobility almost unbreakable, and the number actually experiencing such movement limited both by the means for movement and by the scarcity of vacancies which appear in but cannot be entirely filled by the sparsely populated higher ranks. The means usually used for such movement have been identified as ". . . money, education, occupation, talent, skill, philanthropy, sex, and marriage."<sup>1</sup> And, Havighurst feels (and Warner agrees<sup>2</sup>)

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<sup>1</sup>Warner, Social Class in America, op. cit., p. 23.

<sup>2</sup>Ibid., p. 23.

that "...education has become the principal avenue of opportunity in twentieth century America."<sup>1</sup>

### Middle Class Bias in the Schools

With a little reflection, in which one recalls that most of our schools belong to the public who exercises a "grass roots" control over them, one might guess that the values of the dominant groups of the adult community would "hold sway" in the schools as well. Research assures us that this is the case. (There is much evidence available which demonstrates that the biases of our class system do pervade our schools and, in effect, make "getting an education" easier for middle and upper class children and harder for the lower class child.) Such a situation would, of course, make the opportunity to rise socially via education easier for the classes least in need of upward mobility and harder for the classes which need such mobility most. (Unfortunately, it seems that "school" can very quickly become a place where one is constantly and consistently either accepted or rejected, finds approval or disapproval, is rewarded or punished, and experiences success or failure.) Studies by Neugarten have reported fifth and sixth grade children to be "already" rating upper class children "up" and lower class children "down" in personal traits such as good looks, liking for school, friendliness, leadership, and many others although each child was rated separately

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<sup>1</sup>Havighurst, op. cit., p. 229.

and without reference to social position.<sup>1/</sup> What would seem to be a tragic extension of this condition is the report by Kuhlen and Bretsch which indicated that dropouts were viewed by their former classmates to be personally and socially maladjusted.<sup>2</sup> And, to complete the cycle, there is the evidence by Hollingshead (to name just one) which indicated that dropouts tended to be lower class children:

"That a very close connection exists between the position a family occupies in the class structure and whether an adolescent is in or out of school is demonstrated by the fact that all Class I and Class II adolescents, and nine out of ten Class III [upper and middle class children] were in school, but almost nine out of ten in Class V [Lower class children] had withdrawn."<sup>3/</sup> (Even school-administered IQ tests, the results of which must surely affect positively or negatively the teachers' and schools' relationships with the students, have been found to be not "culture free.") ✓  
 Bells, et al., indicated that the average intelligence tests favored children with middle and upper class

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<sup>1</sup>Bernice L. Neugarten, "The Democracy of Childhood," Chapter 5 in Democracy in Jonesville, W. Lloyd Warner and Associates (New York: Harper & Brothers, 1949), p. 83.

<sup>2</sup>Raymond G. Kuhlen and Howard Bretsch, "Sociometric Status and Personal Problems of Adolescents," Sociometry, X (May, 1947), 122-23.

<sup>3</sup>Hollingshead, op. cit., p. 358.

backgrounds<sup>1</sup> while Warner, reporting on the unpublished studies of Allison Davis, Robert J. Havighurst, and their collaborators, decided that IQ ". . . tests, being largely products of upper-middle-class people, reflect their biases and only middle- and upper-class children are properly prepared to take them."<sup>2</sup> Further, it has been found that ". . . high grades. . . [90] to the students from the 'better' homes and the low ones to the pupils from 'inadequate' or 'unfortunate' homes,"<sup>3</sup> although differences in intelligence have not been capable of explaining this condition. The teachers themselves can bias the schools for ". . . as a group they represent middle-class attitudes and values."<sup>4</sup> (It has been reported that over three-fourths of the teachers are from middle class backgrounds,<sup>5</sup>) and, as they apply their culturally-instilled values to school policy-making and in their dealings with their students, teachers conclude that ". . . upper- and upper-middle-class children possess traits that rank high and are positive; lower-class children have characteristics that are negative

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<sup>1</sup>Kenneth Bells, et al., Intelligence and Cultural Differences (Chicago: University of Chicago Press, 1951), p. 68.

<sup>2</sup>Warner, Social Class in America, op. cit., p. 26.

<sup>3</sup>Hollingshead, op. cit., p. 172.

<sup>4</sup>Havighurst, op. cit., p. 466.

<sup>5</sup>Warner, Social Class in America, op. cit., p. 28.



and ranked low."<sup>1</sup> This public school class favoritism of the well born is again seen in Mullin's study of superior, ✓ average, and poor school attenders. She concluded that a superior attender is ". . .from a home of 'higher socio-economic standing'" and that ". . .he is more generally approved by his teachers. . ."<sup>2</sup> Thus, it seems that it would probably take an almost superhuman effort on the part of a teacher to avoid communicating a preference for and actually creating a tangible favoring of middle and upper class children who already possess or are prone to acquire the very attitudes, qualities, and skills the teacher is laboring to impart (a form of favoritism in itself). And, for a teacher to avoid preferring and favoring the middle and upper class child would be doubly hard should that teacher be also experiencing real resistance and contrary reactions toward his efforts from lower class children. ✓

#### Bias in the Co-curricular Activities

✓ The school's co-curricular activities, likewise, have been studied and are reported to be heavily biased in favor of the middle and upper class students to the point of the almost total exclusion of lower class children from all activities except for a few very low prestige and

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<sup>1</sup>Ibid., p. 28.

<sup>2</sup>Margaret M. Mullin, "Personal and Situational Factors Associated with Perfect Attendance," Personnel and Guidance Journal, XXXIII (April, 1955), 442-43.

strictly class-graded clubs.<sup>1</sup> Pogue found that children from upper income families enjoyed an advantage for participating in school teams and clubs over students from lower income groups and that the leadership roles in such activities were clearly in the control of those students from families with the better incomes.<sup>2</sup> Hand (after placing each student from thirteen small to large public schools into either an upper, middle, or lower category depending on his family's socioeconomic standing and after inventorying the co-curricular activities of each student) concluded that "...the relative frequency with which the less privileged youth found themselves 'included in' was typically very substantially below that of the more fortunately born youngsters."<sup>3</sup> He also concluded that "...no factor other than socio-economic status 'made a difference.'"<sup>4</sup> And, of Mullin's superior school attender, who was generally from a family of higher socioeconomic standing, it was said, "He participates in extra-curricular activities to a greater extent."<sup>5</sup> Havighurst stated that

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<sup>1</sup>Hollingshead, op. cit., p. 202.

<sup>2</sup>Earl G. Pogue, Participation in Extra-class Activities as Related to Socio-economic Classification, Doctoral Dissertation (Champaign-Urbana, Illinois: University of Illinois, 1949).

<sup>3</sup>Harold C. Hand, "Do School Costs Drive Out the Youth of the Poor?" Progressive Education, XXVIII (January, 1951), 89.

<sup>4</sup>Ibid., p. 89.

<sup>5</sup>Mullin, op. cit., p. 442-43.



"in the typical high school. . .the cliques who dominate the social life of the school consist mainly of high-status youth."<sup>1</sup> And, finally, in the high school of Hollingshead's "Elmtown," he observed that "participation in all extracurricular activities, except boys' athletics,<sup>2</sup> is biased in favor of some classes and against others.) .[and that] each club is class-graded."<sup>3</sup> That is, low prestige clubs were avoided by students of the higher social classes, and the high prestige clubs were almost without members from the lower classes.

[That the Hollingshead study found athletics the only co-curricular activity that was not "class-graded" is significant because it is such a striking exception to the rule.] And, when one adds to this finding research which indicates that physically skillful students and student athletes enjoy high status among their peers, the significance of the lack of biases in boys' athletics is compounded. (For here, then, would seem to be an unbiased means for upward social mobility (sports skill) within education which is itself a means (although biased) for upward social mobility in the larger community.) [Here apparently is a route by which the lower class student can gain the personal and usable rewards of peer acceptance

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<sup>1</sup>Havighurst, op. cit., p. 294.

<sup>2</sup>My italics.

<sup>3</sup>Hollingshead, op. cit., p. 202.

which could also cause him to stay in school longer and thereby gain increased status in the out-of-school world. And, finally, here is some slight statistical support for the earlier-mentioned impression that sports is a heavily traveled route by the lower class to higher class membership.

(Evidence of the superior status enjoyed by the physically skilled student and student athlete exists for many grade levels including college. In a study of seventh, eighth, and ninth grade boys McCraw and Tolbert asked each student ". . .to name the three boys he likes best in his own class, the three in his own grade, and the three in the entire school."<sup>1</sup> From the data the researcher decided that "of the factors included in the study, athletic ability. . .is probably the predominant factor in conditioning choices of best liked."<sup>2</sup>) Brace, also using a sociometric approach, established a clear relationship between athletic ability and social status among students in the sixth through the ninth grades.<sup>3</sup> And, Bower's research indicated that "within a group of adolescent boys,

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<sup>1</sup>L. W. McCraw and J. W. Tolbert, "Sociometric Status and Athletic Ability of Junior High School Boys," Research Quarterly, XXIV (March, 1953), 73.

<sup>2</sup>Ibid., p. 79.

<sup>3</sup>David Kingsley Brace, "Sociometric Evidence of the Relationship Between Social Status and Athletic Ability Among Junior High School Boys," Professional Contributions Number 3 (Washington, D. C.: American Academy of Physical Education, 1954).

those who are relatively less physically capable. . .will probably have either less popularity or some compensating superiority."<sup>1</sup> Also, it has been reported by Annarino that in a study of college athletes and non-athletes he found ". . .greater campus social mobility for Purdue athletes as reflected by their dating girls in socioeconomic levels superior to their own"<sup>2</sup> -- a condition that would seem to indicate the athletes were experiencing high status because of their success in sports. (And, finally, Hale concluded, from his review into "What Research Says About Athletics for Pre-high School Age Children," that ". . .children who participate in competitive athletics achieve high social status and prestige, [and] are extremely popular. . ."<sup>3</sup>)

#### The Need for Investigation

This evidence seems to present a paradox. On the one hand, considerable bias is shown to exist in our schools with high prestige activities dominated by the higher classes and low prestige activities avoided by them. On the other hand, athletics is shown to have high prestige

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<sup>1</sup>Philip A. Bower, The Relationship of Physical, Mental, and Personality Factors to Popularity in Adolescent Boys. Doctoral dissertation (Berkeley: University of California, 1941), p. 140.

<sup>2</sup>Anthony A. Annarino, The Contribution of Athletics to Social Mobility. Master's thesis (Lafayette, Indiana: Purdue University, 1951).

<sup>3</sup>Creighton J. Hale, "What Research Says About Athletics for Pre-high School Age Children," Journal of Health, Physical Education and Recreation, XXX (December, 1959), 19-21.

value, and, yet, it is believed that lower class students have at least equal access to this status. Inconsistencies are perhaps not uncommon in our schools and in social life. But, this incongruity seems sufficiently remarkable to warrant re-examination. And, there is added justification for such a study when one considers certain trends which raise doubt that the inconsistency really exists now, if it ever did.

For one thing, there is a current stress in our schools on higher academic standards -- standards which are shown to work an unfavorable bias against the lower classes. When these raised standards are coupled with the stricter athletic eligibility requirements which are now appearing, it seems logical to expect that lower class boys would have difficulty participating in school-sponsored sports. Then, too, there has been an increase in minor sports in school programs. But, such activities as golf, tennis, and swimming require facilities to which lower class boys often do not have enough access to develop their interests and abilities. One might reasonably expect this fact to tend toward shutting this group out of these sports in school and thereby lessening their participation in the over-all athletic program. ✓

Another trend which might call the existence of the above-mentioned inconsistency into question is that perhaps a change of attitude toward sports has occurred on the part of the upper classes. Perhaps radio, press, and television

have changed the image of schoolboy sports from one of low to one of high prestige in the years since the Hollingshead study was conducted. Should this change have occurred, one might now expect increased pressure from the upper classes for greater participation. Such pressure could presently be lessening the opportunities of the lower classes who by now would find what may once have been a relatively open field closing to them.

Personal experience of many years also adds some doubt regarding the reported social equality in membership in the high prestige activities of school athletics. It has been observed that lower class boys are often reluctant to change clothes and shower among the other boys. Whether this is due to a class taboo against nakedness or to the tattered condition of their underclothing or whatever, the fact remains that something in the attitude of many of these boys often brings about a self-elimination from athletic participation.

Therefore, because of the existence of the earlier-cited paradox and because of the other reasons mentioned as causes for doubting a reported social equality in membership on school athletic teams, this re-examination designed to explore the matter seemed justified and was undertaken. This study should also offer information as to the accuracy of the national impression that sports is a heavily traveled lower class route toward higher socioeconomic status to the extent that it makes known (as it must) the

degree to which that impression holds for school athletics. Clues as to how school athletics has achieved its social equality will be sought, should that equality's existence be verified. And, finally, clues as to how individuals have overcome a disadvantageous social class bias against their participation in schoolboy athletics will be looked for, should a social bias be encountered.

## CHAPTER III

### PROCEDURES USED IN THE STUDY

✓ This restudy of a reported social equality in membership on school athletic teams has not paralleled perfectly the approach of the Hollingshead investigation<sup>1</sup> where that equality was first reported. Social equality in school athletics can now be looked for from a vantage point probably not available in the Elmtown research.<sup>2</sup> Sports seems to have been pushed or pulled into lower and lower school grades as time has gone by, and as a result it has now become possible to study which social classes participate in which school-sponsored athletic events and in what proportions in the junior high school years (grades seven through nine).<sup>3</sup> With interscholastic athletics now in the junior high schools, one is no longer limited, as Hollingshead apparently was, to studying the social class of student athletes only after they have reached senior

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<sup>1</sup>Hollingshead, op. cit.

<sup>2</sup>Ibid.

<sup>3</sup>Often even in the upper elementary years of grades four through six.



high school (grades ten through twelve).<sup>1</sup> At the senior high school level selective factors -- often socioeconomic in nature<sup>2</sup> -- may already have operated to rarefy the student body and create perhaps any number of misleading images regarding social equality or inequality in senior high school sports. There is widely reported a disproportionately high dropout rate occurring among the lower socioeconomic groups<sup>3,4</sup> at or before the legal school-leaving age. This is an age which usually places students in late junior or early senior high school. However, most junior high school students have not yet reached the period of heaviest school leaving. Therefore, it was felt that a study of the sports histories of junior high school students whose social class positions had been determined could help make known the equalitarian "nature" of athletics or the lack of it since their sports participation could be measured before the mass exodus of the lower classes and before any corresponding rarefaction of the

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<sup>1</sup>Hollingshead studied all facets of a ninth through twelfth grade high school as they related to one's social class. He was apparently limited to studying athletics only in those grades, for he made no mention of the athletes having had school sports histories prior to their entering the high school. Hollingshead, op. cit., pp. 194-95.

<sup>2</sup>Brace, op. cit.

<sup>3</sup>Ibid.

<sup>4</sup>Hollingshead, op. cit., p. 358.



remainder of the student body occurred. Also, knowledge of the social class of the male members of a junior high school student body, after it had been used to test for social equality in athletics at that level, could then be employed in a longitudinal study extending in some cases through to the high school graduation of some of the original junior high school students. It was felt that this procedure would help determine movements toward or away from in-school social equality in school-sponsored athletics as these students passed through the grades. And, finally, it was believed that such a study would automatically yield observations regarding the frequency with which the several social classes engage in athletics which has such upward lifting powers within school society and to that extent act as a check on the accuracy of the national impression that sports is a well-traveled route of the lower class toward a higher social position. Specifically, the procedures in this study were:

1. To gather for the period between September, 1959, and June, 1963 (from school records, yearbooks, sports programs, team photographs, athletic insurance records, coaches' interviews, and the schools' and city's newspapers), the junior and senior high school sports histories, if any, of every male student from the date he enrolled to begin a school year with an E1

classification<sup>1</sup> in a selected south Florida junior high school through to the date he was no longer enrolled in that junior high school or the one senior high school to which graduates of the junior high under study are slated to go.<sup>2</sup>

2. To socially classify each male junior and senior high school student of the study by a method developed by Warner, known as the Index of Status Characteristics (I.S.C.).<sup>3</sup> By this method each student in the study was to be assigned the same social class position as

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<sup>1</sup>"Any pupil who has not previously, during this school year, entered any public school in this or any other state." Florida Teacher's Register of Attendance (Tallahassee, Florida: State Board of Education), inside front cover.

<sup>2</sup>The original ninth grade of the junior high school in question which opened in September of 1959, given normal progress through the grades, would have been eligible for senior high school graduation in June of 1963. Since both the junior and the senior high school mentioned have pre-varsity and varsity sports opportunities for boys in all three grades of each school, there existed for study by the end of the 1962-63 school year the potential of a school sports history for every boy from the seventh through the twelfth grade in the two schools concerned. This would give to the study a maximum grade range of six school grades (seven through twelve) by the end of the 1962-63 school year and a minimum range of three school grades (seven through nine) by the end of the 1959-60 school year when the junior high had not yet had students to move on to the local high school. This grade range would have increased one grade upward per school year after the 1959-60 school year through the 1962-63 school term.

<sup>3</sup>Warner, Social Class in America, op. cit.

the head of his family.<sup>1</sup> The social class positions of the family heads were determined as follows: First, it was necessary to find out the occupation and home address of the head of each subject student's family from school registration records and city directories. Then, the outside of most of these homes were observed by the researcher, as was each neighborhood; and, both the homes and the neighborhoods (and later the two additional "status characteristics" of occupation and source of income -- made apparent by one's occupation) were rated on seven point scales developed by Warner (see Appendix B, Table 8). These scores were then weighted (see Appendix C, Table 9) on a Warner scale designed to give a "...maximum degree of social class prediction."<sup>2</sup> And, finally, the weighted scores were added together and in this single-score-form applied directly to his table of "Social Class Equivalents for Old Americans, Jonesville" (Table 2).<sup>3</sup> (There was no ethnic factor to be considered in the school district under study.) Each family head and his family members (which

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<sup>1</sup>Social position need be "...determined for no one but the head of the family. All other members of the family who are unmarried and living in the same house are assigned the same social status." Ibid., p. 121.

<sup>2</sup>Ibid., p. 122.

<sup>3</sup>"In cases where a close approximation is sufficient, ...and where some misplacement of a few individuals will not introduce serious error, it may be satisfactory to use the Jonesville conversion data. . .without checking the class dividing lines for the new community." Ibid., p. 128.

would include the subjects of this study) were thus assigned the social class position indicated by the Jonesville social class equivalency scale. The classification proceeded on this basis of rating the four status characteristics of the head of each student's family which existed on the date of the E<sub>1</sub> male student's junior high school registration in September of 1962.<sup>1</sup> Students who had been enrolled in the junior high school for one to three previous school years were classified for those years on the basis of the status characteristics, less house type,<sup>2</sup> possessed by the heads of their families during the September of all previous school registrations. The house type was not considered because of the time lapse which occurred before each could be viewed and classified by the researcher and because occasionally one- to three-year-old addresses were no longer accurate. The social classification of the senior high school male students, formerly of the junior high school of the study, also proceeded on the basis of rating the status characteristics of the heads of their families which existed during the September in which these high school students were enrolled in the ninth grade of the junior high school in question. But, here also the

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<sup>1</sup>The researcher had completed the viewing and rating of each home and each neighborhood during the month of October, 1962.

<sup>2</sup>"If the data for any of these four ratings are lacking, the other three should be computed." Warner, Social Class in America, op. cit., p. 122. (See Appendix C, Table 9.)

classification was conducted without a rating of house types,<sup>1</sup> since in all cases time again had elapsed before the houses could be viewed and classified, and here, too, old addresses were occasionally inaccurate. Warner says very clearly that "the Index of Status Characteristics [the social classification tool of this study] measures the socioeconomic levels of the community. . ."<sup>2</sup> Wishing to convert such socioeconomic characteristics into equivalent social class terms but improve upon the (but "close approximation"<sup>3</sup> of social class equivalency that was to follow from use of the Jonesville conversion data, it was decided to award the students of the indeterminate areas -- which lie between clearly established social classes and between intra-class divisions on the Jonesville social class equivalency table (see Table 2, page 31) -- to the class or divisions immediately below the area of such indetermination. It was felt that such a procedure would increase statistically the difficulty of finding a social class bias existing in school athletics which favored the classes above the lower classes and overcome perhaps some of the inherent weaknesses of establishing social class equivalents from socioeconomic characteristics via an

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid., p. 35.

<sup>3</sup>Ibid., p. 128.

equivalency found to exist by another researcher in another community at another time.<sup>1</sup>

3. To employ the statistical tool of chi square ( $\chi^2$ ) using the individual as the unit of study. Chi squares were developed from contingency tables of two columns (athletes - non-athletes<sup>2</sup>) and as many rows as there were social classes discovered on the basis of the "Jonesville" conversion data<sup>3</sup> (except where adjacent intra-class divisions and the areas of indetermination which lay between them were combined to maintain expected cell frequencies of five or larger -- as is recommended<sup>4</sup> -- or where an intra-class division and the area or areas of indetermination which lay above it were combined to complete the elimination of the indetermination). Also, a

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<sup>1</sup>Ibid.

<sup>2</sup>A boy was considered an athlete for the purposes of this study if the coach of the team the boy "tried out for" considered the boy a member of that team. Exhaustive lists of those who sought membership on school teams were shown to coaches for judgment. The lists were developed from athletic insurance records, team rosters, team photographs, yearbooks, and newspaper sports articles. A boy was considered a non-athlete if he was ruled not a team member by the coaches or if at no time during a school year did he seek membership on a school team.

<sup>3</sup>Although many boys sought positions on several different school teams in a given school year, they were statistically considered only once in arriving at the number of athletes that existed among the male student body of the school that year.

<sup>4</sup>Lillian Cohen, Statistical Methods for Social Scientists (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1954), p. 127.



correction factor<sup>1</sup> was used with senior high school data where the combining of all adjacent intra-class divisions and areas of indetermination which lay above and between them into a four-fold contingency table would approach but not always yield expected cell sizes of five or larger. Chi square was chosen to determine the statistical significance of the social make-up of the athletic teams of the junior high school and the social make-up of that part of the athletic teams of the senior high school composed of former students of the junior high school of the study. This statistical procedure was used so that the questions of social equality in school athletics and its increase or decrease with matriculation could be examined. Further, it was believed that an awareness of significance made possible by the chi square approach would help throw some light on the question, "Is the lower class placing itself in a position to rise, at least proportionately, in school society by way of school athletics?"

#### Case Studies

Case studies of student athletes who succeeded in school athletics in the face of a social bias to the contrary were planned in the event that a bias was discovered. It was hoped that such an undertaking would make the present investigation of more use than would otherwise result from a simple denial of the Hollingshead report of

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<sup>1</sup>Ibid, p.127.

social equality in membership on school athletic teams, if a denial be justified. For reasons already mentioned which prompted this study in the first place, a social bias against school sports participation by lower class boys was anticipated; so, the need to conduct case studies seemed likely, and the studies were to proceed as follows:

Former student athletes of the junior high school of the study who sought and gained a senior high school athletic team position (although a member of a social class which experienced a disadvantageous bias against such participation in junior high school) were to be "paired" socially, athletically, and by scholastic aptitude with other former student athletes of the same junior high school who did not succeed in senior high school sports. The homes of each of the boys in a pair were to be visited and the parents interviewed from a questionnaire developed for this purpose (see Appendix A). The boys were to be paired by holding each in a pair to the same social class and intra-class division. (The social classification procedure has already been described.) The athletic pairings were to be made on the strength of athletic equivalency ratings made by coaches who had had a close player-coach relationship with all of the junior high school athletes. And, finally, the scholastic aptitude pairings were to be based on the grade placement scores earned by each boy on his junior-high-school-administered ninth grade California Achievement Test. Each boy in a pair was to be held to



the same school year and month grade placement by the achievement test.

[ The hope was that the results of these case studies might in effect describe some set of personal attributes or mode of personal behavior or some "next step" for families or society in general that might be useful to teachers in helping other students to escape from the debilitating "social groove" or "rut" of non-participation or discontinued participation in school activities (athletics) with  
[ upward social pull -- should such a rut appear.

## CHAPTER IV

### RESULTS OF THE INQUIRY

Weighted socioeconomic status scores, achieved through use of Warner's Index of Status Characteristics (I.S.C.)<sup>1</sup> may range from twelve through eighty-four points ". . .with small numerical values indicating high socioeconomic status and large numerical values indicating low socioeconomic status."<sup>2</sup> The I.S.C. numerical ranges found to exist among the E<sub>1</sub> male junior and senior high school students of this study by school year were as follows:

TABLE 1

I.S.C. RANGES OF MALE STUDENTS  
BY SCHOOL AND SCHOOL YEAR<sup>a</sup>

	Junior High		Senior High	
	Low	High	Low	High
1959-60	26	74	-	-
1960-61	28	77	26	69
1961-62	26	74	26	69
1962-63	26	76	26	69

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<sup>a</sup>There were no former junior high school students of the study in the senior high school under examination during the 1959-60 school year because the junior high school in question had opened for the first time that year.

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<sup>1</sup>Warner, Social Class in America, op. cit., p. 121.

<sup>2</sup>Ibid., p. 124-25.

TABLE 2

SOCIAL-CLASS EQUIVALENTS FOR I.S.C. RATINGS  
FOR OLD AMERICANS, JONESVILLE<sup>a</sup>

Weighted Total  
of Ratings

12-17	Upper Class
18-22	Upper Class probably, with some possibility of Upper-Middle Class
23-24	Indeterminate: either Upper or Upper-Middle Class
25-33	Upper-Middle Class
34-37	Indeterminate: either Upper-Middle or Lower-Middle Class
38-50	Lower-Middle Class
51-53	Indeterminate: either Lower-Middle or Upper-Lower Class
54-62	Upper-Lower Class
63-66	Indeterminate: either Upper-Lower or Lower-Lower Class
67-69	Lower-Lower Class probably, with some possibility of Upper-Lower Class
70-84	Lower-Lower Class

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<sup>a</sup>Warner, Social Class in America, op. cit.,  
p. 127. (Table reprinted with author's permission.)

I.S.C. scores as developed by Warner were found by him to be equivalent to the social class positions in one community as shown in Table 2. Employing the social class equivalencies in Table 2 directly to the I.S.C. scores found to exist in the two schools of this study indicated the presence of an upper-middle and lower-middle class and



an upper-lower and a lower-lower class in both schools. The number and percent of E<sub>1</sub> male junior and senior high school students and athletes<sup>1</sup> by I.S.C. ranges equivalent to several of the Jonesville ranges can be found in Table 3.

In order to use chi square to examine these data for significance but keep expected cell frequencies from falling below five in number in the contingency tables, with the junior high school data it was necessary to allow the rows of the two-columned (athletes, non-athletes) contingency tables not to equal the number of social classes discovered. Instead, the combining of the adjacent intra-class divisions of the upper-middle class, the lower-middle class, and the indeterminate area which lay between them was necessary to gain sufficient expected cell size there. The other indeterminate areas, as between the lower-middle and the upper-lower class and between the upper-lower and the lower-lower class, were in all cases awarded to the class lying immediately below the area of indetermination in order to statistically rid the study of the remaining indetermination and increase the burden to prove that a social

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<sup>1</sup>The athletic program in the junior high school included football, basketball, baseball, and track in 1959-60 and 1960-61. Swimming was added in 1961-62, and to these five sports golf was added in 1962-63. In the senior high school football, basketball, baseball, track, and golf were played by former students of the junior high of the study in the three years from September, 1960, through June, 1963. Swimming was also participated in during 1962-63.

class bias existed favoring the classes above the lower classes in school athletic participation. From this method a six-celled contingency table was developed (see Tables 4 and 7). With regard to the senior high school data: Because expected cell frequencies could not be held to five or higher, even after combining adjacent intra-class divisions within the middle class and after combining the adjacent intra-class divisions with the lower class, it became necessary also to employ a correction factor -- possible only in a four-celled approach such as this -- to adjust for the insufficient cell sizes. The rationale for combining adjacent intra-class divisions into a four-fold contingency table for the senior high school data was the same as for the junior high. That is, in the case of the senior high the upper-middle and lower-middle classes and the indeterminate area lying between them were combined to make up one row of the earlier-mentioned two-columned contingency table; and the upper-lower and lower-lower classes and the indeterminate areas lying between them, and immediately above the upper-lower class, were all combined to make up the other row.

In Table 4 which follows it will be shown that a significant social class bias in athletic participation in junior high school was found to exist which favored the middle class in three of the four years of the study. The fourth year was found free of social class bias with regard to athletic participation. The fact that there was

TABLE 4

OBSERVED AND EXPECTED ATHLETIC PARTICIPATION AND  
 NON-PARTICIPATION IN THE JUNIOR HIGH SCHOOL'S  
 TOTAL ATHLETIC PROGRAM BY SCHOOL YEAR AND  
 BY ADJUSTED SOCIAL CLASS POSITIONS WITH  
 RESULTING CHI SQUARE ( $\chi^2$ ) RATIOS

	Cell	Frequency		Chi Square Ratio (fo - fe) <sup>2</sup> fe
		Observed (fo)	Expected (fe)	
	I.S.C.			
1959-60	Athletes			
	Middle class (25-50)	11	7.009	2.272
	Upper-lower class (51-62)	37	31.544	.943
	Lower-lower class (63-84)	11	20.445	4.316
	Non-athletes			
	Middle class (25-50)	13	16.991	.937
	Upper-lower class (51-62)	71	76.456	.389
1960-61	Lower-lower class (63-84)	59	49.555	1.800
	Total	202	202.000	$\chi^2=10.657 < .01$
	Athletes			
	Middle class (25-50)	7	7.303	.012
	Upper-lower class (51-62)	27	25.209	.127
	Lower-lower class (63-84)	11	12.486	.176
	Non-athletes			
1961-62	Middle class (25-50)	24	23.697	.003
	Upper-lower class (51-62)	80	81.791	.039
	Lower-lower class (63-84)	42	40.514	.054
	Total	191	191.000	$\chi^2= .411 < .90$
	Athletes			
	Middle class (25-50)	22	13.711	5.001
	Upper-lower class (51-62)	29	31.899	.263
1962-93	Lower-lower class (63-84)	10	15.389	1.887
	Non-athletes			
	Middle class (25-50)	27	35.289	1.946
	Upper-lower class (51-62)	85	82.101	.102
	Lower-lower class (63-84)	45	39.611	.734
	Total	218	218.000	$\chi^2= 9.933 < .01$
	Athletes			
1962-93	Middle class (25-50)	26	15.552	7.019
	Upper-lower class (51-62)	39	41.184	.115
	Lower-lower class (63-84)	7	15.264	4.474
	Non-athletes			
	Middle class (25-50)	28	38.448	2.839
	Upper-lower class (51-62)	104	101.816	.046
	Lower-lower class (63-84)	46	37.736	1.809
	Total	250	250.000	$\chi^2=16.302 < .001$



TABLE 5

OBSERVED AND EXPECTED ATHLETIC PARTICIPATION AND  
 NON-PARTICIPATION IN THE SENIOR HIGH SCHOOL'S  
 TOTAL ATHLETIC PROGRAM BY SCHOOL YEAR AND  
 BY ADJUSTED SOCIAL CLASS POSITIONS WITH  
 RESULTING CHI SQUARE ( $\chi^2$ ) RATIOS<sup>a</sup>

	Cell		Frequency		Chi Square Ratio $\frac{(fo - fe)^2}{fe}$
			Observed (fo)	Expected (fe)	
	I.S.C.				
1960-61	Athletes				
	Middle class	(25-50)	3	1.543	.593
	Lower class	(51-84)	3	4.457	.205
	Non-athletes				
	Middle class	(25-50)	6	7.457	.123
	Lower class	(51-84)	23	21.543	.043
	Total		35	35.000	$\chi^2 = .964 < .50$
1961-62	Athletes				
	Middle class	(25-50)	4	2.538	.364
	Lower class	(51-84)	11	12.462	.074
	Non-athletes				
	Middle class	(25-50)	7	8.462	.109
	Lower class	(51-84)	43	41.538	.022
	Total		65	65.000	$\chi^2 = .569 < .50$
1962-63	Athletes				
	Middle class	(25-50)	6	4.989	.052
	Lower class	(51-84)	13	14.011	.018
	Non-athletes				
	Middle class	(25-50)	20	21.011	.012
	Lower class	(51-84)	60	58.989	.004
	Total		99	99.000	$\chi^2 = .086 < .80$

<sup>a</sup>A correction factor for chi square ( $\chi^2$ ) was employed.

no class bias in one of four years of the junior high athletic program demonstrates the possibility of such an occurrence and warns of the real possibility of being misled by short-term (single-year) data.

Table 5 shows that no social class bias was carried over into the athletic program of the senior high school



under examination by the matriculating junior high school students of the study. That this condition was found to exist in senior high school sports was doubtlessly due at least in part to the steady year-by-year social rarefaction (rise in social class mean) of each school class with its matriculation through the grades (see Appendix D). This rarefaction culminated in the complete absence of those lower-lower class students with I.S.C. ranges of from seventy through eighty-four points from the group under examination among the senior high school student body for the three years of the study (a group particularly low in athletic participation in junior high school). Meanwhile, the junior high could count twenty-seven male students of the seventy through eighty-four I.S.C. range among its student body during these same three school years and thirty-eight such students over a four-year period. In fact, as can be seen in Table 6, the entire lower-lower class (I.S.C. sixty-three - eighty-four) dropped from comprising between slightly over 21 percent to over 34 percent of the student body in the four years of junior high school data to comprising but between about 13 percent to slightly over 15 percent of the group being studied among the student body in the senior high school during a three-year period. And, although this group generally experienced an even greater drop in its rate of athlete production than it demonstrated in over-all student body decrease in senior high school

TABLE 6

NUMBER AND PERCENT OF MALE STUDENTS AND MALE  
ATHLETES BY SCHOOL AND SCHOOL YEAR AND  
BY ADJUSTED SOCIAL CLASS POSITIONS

I.S.C. and Class Equivalents	1959-60			1960-61			1961-62			1962-63		
	No.	%	Students	No.	%	Athletes	No.	%	Students	No.	%	Athletes
The Junior High School												
Middle	24=11.88		11=18.64	31=16.23		7=15.56	49=22.48		22=36.07	54=21.60		26=36.11
Upper-lower	108=53.47		37=62.71	107=56.02		27=60.00	114=52.29		29=47.54	143=57.20		39=54.17
Lower-lower	70=34.65		11=18.64	53=27.75		11=24.44	55=25.23		10=16.39	53=21.20		7= 9.72
Total	202	59		191	45		218	61		250	72	
The Senior High School <sup>a</sup>												
Middle				9=25.71		3=50.00	11=16.92		4=26.67	26=26.26		6=31.58
Upper-lower				21=60.00		3=50.00	44=67.69		10=66.67	60=60.61		12=63.16
Lower-lower				5=14.29			10=15.38		1= 6.67	13=13.13		1= 5.26
-----Total				35	6		65	15		99	19	

<sup>a</sup>It should be remembered that the senior high school data were placed into a four-celled contingency table of two columns (athletes and non-athletes) and two rows (middle and lower class) for chi square analysis and not into six cells with three rows as the above table might indicate.

compared to junior high, the upper-lower class (with whom the lower-lower class was combined in the senior high) experienced a proportionate rise in its number of students in senior high over junior high and a disproportionately greater rise in its rate of production of senior high school athletes. This upper-lower class rise in senior high school athlete production, coupled with the fact that the middle class usually failed to produce a corresponding increase in the number of senior high school athletes they were producing over junior high (although proportionately they had increased in numbers of students in senior high), thereby raised the shrunken, although combined, lower class's rate of athletic participation high enough to eliminate the appearance of a bias in senior high school sports.

At no time did a student who did not play junior high school sports attempt senior high school athletics. And, although any number of possibilities come to mind to \* account for the general decrease in the rate of athletic participation of the middle class in senior high school over junior high school and the general increase in athletic participation in senior high school by the upper-lower class over their rate of athletic participation in junior high school, logically it would seem to be indicated that the upper-lower class athletes as a group remain in school in larger numbers than do their non-athletic social class

mates. Therefore, the middle class, which seems to stay in school, athletes or not (even if they must abandon athletics in order to remain), must necessarily experience a decrease in its rate of athlete "over-production," in this case to the point of the statistical disappearance of the once-flourishing bias that operated in their favor with regard to membership on junior high school athletic teams.

That Tables 4 and 5 include among the athletes' column participants in sports in addition to football, basketball, and baseball (the sports from which the Hollingshead finding of no class bias was derived) forces the question, "Is not the social class bias found in the junior high the direct result of the addition of these 'newer' sports to school athletics?" To answer this question, all athletes who participated only in sports other than football, basketball, and baseball in junior high school were dropped from the classification of "athletes," and new chi square ratios were then developed. As can be seen from Table 7 which follows, the three junior high school years which were found to be socially biased in athletic participation in favor of the middle class when the total sports program was examined remained significantly biased in favor of the middle class when only football, basketball, and baseball were considered. However, the degree of significance decreased from .01 to .05 for one school year; from .001 to .01 in another; while remaining at .01 in a third. In the fourth year (where no

TABLE 7

OBSERVED AND EXPECTED ATHLETIC PARTICIPATION AND NON-PARTICIPATION IN THE JUNIOR HIGH SCHOOL'S FOOTBALL, BASKETBALL, AND BASEBALL PROGRAMS BY SCHOOL YEAR AND BY ADJUSTED SOCIAL CLASS POSITIONS WITH RESULTING CHI SQUARE ( $\chi^2$ ) RATIOS

	Cell	Frequency		Chi Square Ratio $\frac{(fo - fe)^2}{fe}$
		Observed (fo)	Expected (fe)	
	I.S.C.			
1959-60	Athletes			
	Middle class (25-50)	10	6.534	1.838
	Upper-lower class (51-62)	36	29.405	1.479
	Lower-lower class (63-84)	9	19.059	5.308
	Non-athletes			
	Middle class (25-50)	14	17.466	.687
	Upper-lower class (51-62)	72	78.595	.533
	Lower-lower class (63-84)	61	50.941	1.986
	Total	202	202.000	$\chi^2=11.831 <.01$
1960-61	Athletes			
	Middle class (25-50)	7	7.141	.002
	Upper-lower class (51-62)	27	24.649	.224
	Lower-lower class (63-84)	10	12.209	.003
	Non-athletes			
	Middle class (25-50)	24	23.859	.0008
	Upper-lower class (51-62)	80	82.351	.067
	Lower-lower class (63-84)	43	40.791	.001
	Total	191	191.000	$\chi^2= .298 <.90$
1961-62	Athletes			
	Middle class (25-50)	19	12.362	3.564
	Upper-lower class (51-62)	27	28.761	.107
	Lower-lower class (63-84)	9	13.876	1.713
	Non-athletes			
	Middle class (25-50)	30	36.638	1.202
	Upper-lower class (51-62)	87	85.239	.036
	Lower-lower class (63-84)	46	41.124	.578
	Total	218	218.000	$\chi^2= 7.200 <.05$
1962-63	Athletes			
	Middle class (25-50)	24	14.904	5.551
	Upper-lower class (51-62)	38	39.468	.054
	Lower-lower class (63-84)	7	14.628	3.977
	Non-athletes			
	Middle class (25-50)	30	39.096	2.116
	Upper-lower class (51-62)	105	103.532	.02
	Lower-lower class (63-84)	46	38.372	1.516
	Total	250	250.000	$\chi^2=13.234 <.01$



significance was originally found when the total athletic program was considered) there was a slight, although statistically insignificant, movement toward greater equality when only the three sports of the Hollingshead study were considered.

The senior high school remained statistically free of bias in the athletic program when the sports not played in the high school of the Hollingshead study were dropped from consideration in the data gathered in the senior high school of the present study (see Appendix E).

### Case Studies

The plan to do case studies on both the athletes who achieved junior and senior high school sports team membership in spite of encountering at some point a class bias to the contrary and upon their paired junior high school scholastic, athletic, and social class equivalents who did not succeed in senior high school sports had to be revised. Only one boy at the upper end of the social class division that was clearly and consistently experiencing a class bias against participation in junior high school athletics (the lower-lower class) managed to succeed for a time in senior high school sports.<sup>1</sup> Such a development would have made

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<sup>1</sup>The boy met with success in senior high school football during the tenth and eleventh grades but claims he was not "invited out" for football in the twelfth grade by his coach due to the boy's failure to participate in spring practice prior to his senior year because of a desire to participate in the out-of-school activity of competitive roller skating.

this boy the lone subject for examination. Therefore, a partner for this boy and two more pairs of athletes were included for study, although they had to be added from the lower end of the upper-lower class -- the particular athletes and class division socially closest to the social class consistently experiencing a strong, disadvantageous class bias as to junior high school athletic participation. These upper-lower class junior high school athletes, however, cannot be considered as having faced a strong disadvantageous class bias with regard to their junior high school athletic participation.

The impressions which resulted from the case studies of the three boys who succeeded in junior high school athletics but failed to succeed in senior high school sports are as follows: In all cases the fathers of the three boys were generally held responsible in their respective families for the family's past difficulties -- the son's misconduct and disinterest in school and the ineffectiveness of the mother in handling the boy. In two cases alcohol and in one case a religious fervor of a hermit type had robbed the boys of father leadership and drained the boys of all respect for their fathers since the behavior of the three men often placed them "outside" accepted behavior and "at war" with the community and with their own wives and children. The boys themselves seemed "at war" with the school and, in one case, civil law and, in general, failed frequently to conform to school policies.



They seemed aware of the middle class values posed by the school and fully aware of the opportunities available to them as a direct result of senior high school sports success, and yet they fought against school policies and the faculty which administered them (seeming to be almost without friends among the teachers) and recklessly jeopardized their academic and sports futures. One of these boys quit school when faced with repeating the ninth grade and thereby falling two years behind in school (he also had failed the seventh grade). Another, faced with three years of athletic ineligibility in high school (he was on probation to the tenth grade and restricted from sports that year -- his final year of athletic eligibility), quit in the third month of the tenth grade. The third boy, confronted with repeating ninth grade, attended summer school, passed to the tenth grade, starred in junior varsity football that year, then failed to "report out" for eleventh grade football -- although enrolled in school -- because of his father's violent opposition to education in general and co-curricular activities in particular for his children. (He wants his children to farm, which he does not do, and "stay away from the corrupting effects of the ugly, outside world.") All three of these boys according to standardized tests were academically as informed as the partner to whom each was academically, athletically, and socially paired, and all three were a coach's "dream" -- big, strong, fast, aggressive, and real leaders. However, these three boys

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were probably perfect examples of research which points out that lower class children who do not adjust to the middle-class-oriented schools are at a decided disadvantage in the schools.<sup>1</sup>

Of the three boys who succeeded in senior high school sports although socially they (and their unsuccessful partners) were within or nearest to the social class which experienced a strong and unfailing class bias against sports participation in junior high school, it can be said that the boys demonstrated a wholehearted acceptance of the middle class values of the school and the faculty which reflected and enforced them. The boys handed in their assignments; they did not become discipline problems or break athletic training rules; and they did not "skip school." They were friendly, liked by the faculty and students, conscientious, and predictable. They passed through the grades without falling behind and made the "starting teams" of the sports they attempted. One was even voted "most athletic" in his senior year in high school and was "tapped" for the fraternity of his choice at the local junior college which does not play interscholastic sports. It appeared that each of the three families of the boys who succeeded in high school sports was dominated by the mother and that her leadership was ungrudgingly acknowledged by the husband who strongly supported her in

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<sup>1</sup>Havighurst, op. cit., p. 152.

this role. The mothers wanted the very best for their sons,  
had a rather clear idea of what was "good" for their boys,  
and each had a free hand plus husband support in working  
toward this design for her child. The sons, themselves,  
seemed to have begun taking the lead in reminding their own  
families of the middle class position in matters, and each  
was very concerned with improving his family's image.

As was pointed out earlier, five of the six families  
were upper-lower class, and one was lower-lower class. No  
important difference could be seen in the amount of educa-  
tion of the parents of the six families or in their occupa-  
tions. Further, no important difference could be seen in  
the amount of education or type of occupation of the grand-  
parents on either side of the students' families. Also,  
all six families showed a remarkable stability with regard  
to dwelling site. But, there seemed to be a clear dif-  
ference in family stability in other ways in that the  
family's head of each of the successful senior high school  
athletes unfailingly worked many years for the same company,  
enjoyed as a result a steady income, and each of these  
three families apparently pulled together toward such  
goals as "fixing up the house," a new stove, and a high  
school education for all the children. On the other hand,  
the fathers of the three senior high school athletic  
failures held jobs comparable to the fathers in the  
families with the successful senior high school athletes --  
but held such jobs for relatively short periods of time,

with periods of long unemployment not unusual. In the latter instance income as a result was not stable, although "take home pay" when working was on a par with the more stable family heads. The houses of the six families were located in comparable neighborhoods, and the houses, themselves, were similar. However, in the houses of the three unsuccessful senior high school athletes there was not the evidence of long-range family planning, either materializing or existing. The mother appeared worn-out from the lack of unity of purpose she experienced with her husband and sad to almost melancholy about the past and the future.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

In recent years numerous studies have come forth to demonstrate the existence of a social class system in the United States. Consistently, these studies have shown that our class system works to the advantage of the middle and upper classes and to the disadvantage of the lower groups. It has been reported that numbered among the advantages enjoyed by the middle and upper classes are the public schools which tend to favor their children in a variety of ways. But, (even though people are born into one or another of the social classes which comprise our social structure, there is some equality of opportunity present) for research tells us that individuals are, in varying degrees, free to rise on the social scale by following some one of a limited number of routes which lead to higher status. Education, although biased in favor of the more privileged groups, is said to be one of those routes, and happily it is reported that within education there is one area where social class favoritism seems not to exist. Many studies indicate that physically skillful students experience high status among the student body, and at least one classic study has reported school athletics to be unbiased in that it

"...attracts boys from all classes in about the same proportion."<sup>1</sup>

This "equalitarianism" found to exist in school athletics is so contrary to the remainder of our schools' curricular and co-curricular programs that a restudy was here undertaken inspired by the skepticism with which one often views the exception and by the promise of either discovering the causes of such equality or being able to raise serious doubt as to that equality's continued existence. Other things encouraged the undertaking of this as well. [Our schools' present push for high academic standards and stricter athletic eligibility rules both seemed capable of introducing into schoolboy athletics a bias that would work an extreme hardship on the lower classes.] Also, our expanded school athletic program which now includes such sports as golf, tennis, and swimming seemed at least in these instances to be catering to students where excellence in such activities presupposes a privileged socioeconomic background. And, finally, years of personal public school experience has given rise to the impression that many lower class students have a strong aversion to the public undressing and re-dressing associated with athletics and seem to eliminate themselves from team membership by avoiding the program. Should this observation be accurate, a definite tendency toward a social

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<sup>1</sup>Hollingshead, op. cit., p. 194.



3 bias in school sports would exist. For these reasons a re-study of the reported social equality in school athletics was undertaken; the degree to which the social classes engage in the admittedly socially uplifting activities of school athletics was to be noted; and clues to the overcoming of bias were to be sought, should a bias be discovered.

With interscholastic athletics now in the junior high school (grades seven, eight, and nine), it was decided to determine the social class position of each male student who ever attended a selected four-year-old junior high school, hold the ninth grade social class position constant through senior high school for each of the subjects who matriculated locally, and determine both the junior and senior high school sports histories of all the male subjects of the study. Next, chi square was used to determine significance of the social class make-up of the study's junior and senior high schools' athletic teams. And, because of the appearance of a disadvantageous lower class bias against athletic participation in the junior high, case studies of three sets of lower class students who were social, athletic, and academic equals (one of each set succeeded in senior high school sports and one did not) were conducted in search of clues to overcoming such bias.

Both the total junior high school athletic program (as many as six sports) and that part of its program that was no more extensive than the three-sports athletic



program of the high school of the Hollingshead investigation were significantly biased in favor of the middle class over the lower class in three of the four years of the school's existence. During the three years in which former junior high school students of the study attended the local senior high school, they encountered no statistically significant bias favoring or opposing their participation in either the school's total athletic program or in just that part of its program which paralleled the three-sports program in the Hollingshead study. The failure of the bias found in the sports program of the junior high school to move on with the students into the senior high seemed caused

(1) by a failure of the large lower-lower class which produced few athletes in junior high to appear in any great numbers in senior high; (2) by many middle class junior high school athletes attending senior high school but dropping out of athletics apparently to assure that they would accomplish passing work there; and (3) by the upper-lower class junior high school athletes' attending senior high school in greater numbers than their non-athletic junior high school social class equals and by the almost unfailing senior high school athletic participation of the former junior high school upper-lower class athletes. There is a social class bias in schoolboy athletics, but, if one looks for it only in senior high school, he may not recognize it.

The earlier-mentioned case studies of three pairs of subjects indicated that a child can be defeated by or can overcome class-inspired bias experienced in the schools to the degree that his parents or dominant parent has defeated or been defeated by the class bias he encounters in the community. The case study subjects who showed that they had overcome bias by their continued and successful participation in school athletics seemed, along with their families, to have adopted the values of the classes above them, and the boys as a result were accepted by the students from the high classes and their parents and by the teachers.

On the other hand, the case study subjects who had been defeated by bias, as demonstrated by their failure to continue in two cases in school and in all cases in athletics, seemed, along with their families, to have incurred because of their behavior an image of actually belonging to the class below themselves (the lower-lower class) and as a result seemed destined to "sink" finally into that group. The case study subjects of these families after a number of clashes with society seemed almost anxious to identify with the bad reputations of their fathers although aware that in so doing they would alienate most of the parents, students, and school officials and finally be rejected by them.

We in America like to believe that sports is a well-traveled, if not an almost exclusive, route toward higher social and economic standing by the lower classes, and, although we have many pieces of research to show that sports

skill does earn one high status in school, the present study indicates that at least in one public school the lower-lower class tends to be excluded from athletics and its potential for improving one's social position. This finding is, of course, in direct disagreement with an earlier report of social equality in school athletics<sup>1</sup> and would seem for the present, at least, to present doubt as to the accuracy of the view that school sports offers a readily accessible route to the lower class for social mobility. Certainly there are a number of professional athletes who have risen from poverty to economic success and prestige by way of their trade. And, certainly there are college graduates who were originally from lower classes but "bettered themselves" as a direct result of an athletic scholarship. But, the present study questions the frequency of these occurrences, suggesting that such happenings are the exceptions which we, the public, eagerly magnify out of a desire to believe them to be commonplace. And, possibly upon a closer examination of actual sports successes from the lower classes, this study suggests that they would much more likely be individuals who rose from the upper end of the lower class and only rarely would they have risen from a true lower-lower class position. Also, there is some evidence in the present study to suggest that lower class athletes generally come from families who, rather than having

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<sup>1</sup>Hollingshead, op. cit.

been beaten by alien higher class values, have adopted them as their own and are actively imparting those values to their family members. In fact, such families may of themselves be in the process of rising to a higher social position./

Researchers have often pointed to the gulf between the upper-lower and the lower-lower classes as being the widest social gap within any community, and certainly the difference in the degree of bias experienced by the children of these two groups is apparent in this paper. / Educators and the public alike should examine this gulf which exists between our lowest groups to see if most of our opportunities for climbing the social scale do not actually extend no lower than to the upper-lower class families. / Perhaps such an examination would even reveal that the opportunities to rise socially are extended only to the "undefeated" among the upper-lower class families, i.e., those still identifying with the community and its social customs and civil laws. And, if in looking it is found that America's equality of opportunity usually does stop somewhere above the lower-lower ranks of our society, / the identification of a great social problem would be the reward.

/ Of the several routes for upward social mobility in our society, perhaps athletics does potentially possess the greatest degree of accessibility to the lower classes. / However, this study offers limited evidence to support the conclusion that in our schools this accessibility may not now

freely exist. Probably many school policies would have to change to help open this route of mobility to the lower ranks, but speculation as to what these policy changes need be is a sufficient undertaking for another study. Suffice it to say that a necessary condition for opening up school athletics so that more of the lower classes can be made socially mobile by their participation in the program would be a general awareness of the possibility that this route is not now entirely open.

Some clarification should probably be interjected here. Taking the position that sports is possibly the lower class's most naturally accessible route to higher ranks does not imply that athletes need strong backs but only weak minds or that the lower classes are natively so endowed and, therefore, best equipped in sports among all the routes which lead to an improved social position. Athletics is offered as the lower class's most accessible route simply because sports skills seem to act as a great "social equalizer." And, Hollingshead has already indicated high school coaches to be ". . .scrupulously honest in their relations with. . .Class V [Lower class] boys. . .".<sup>1</sup> Rejecting the position that the lower classes are bodies without minds spreads the obligation of making these lower ranks socially mobile to the other curricular and co-curricular areas of education as well. An examination of the school policies regarding

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<sup>1</sup>Ibid., p. 195.

dramatics, band, student council, and the like seems quite in order. And, finally, to the end of school-wide policy re-examination, the present study would seem to caution against such an undertaking becoming a venture of senior high school only for it would seem indicated that the damaging effects of social bias are experienced well before these upper grades. The examination for school-harbored social bias needs to be undertaken in the elementary and junior high school years as well.

## APPENDICES



## APPENDIX A

QUESTIONNAIRE DEVELOPED FOR PARENT  
INTERVIEW IN CASE STUDIES

Student's name \_\_\_\_\_  
Present address \_\_\_\_\_

The family (is renting, is buying, owns) the home.

The student has lived at this address for \_\_\_\_\_ years,  
\_\_\_\_\_ months.

The resident address prior to this current address was  
\_\_\_\_\_ street  
\_\_\_\_\_ city, state.

The previous address was (rented, being purchased, owned).

The student has \_\_\_\_\_ older brother(s) and \_\_\_\_\_ older sister(s).  
" " " \_\_\_\_\_ younger " " \_\_\_\_\_ younger "

The adults with whom the student now lives are his  
\_\_\_\_\_ (male)  
\_\_\_\_\_ (female).

The usual occupations of these adults are  
\_\_\_\_\_ (male)  
\_\_\_\_\_ (female).

The grandfather and the grandmother on the adult male's side have had (little, some, much) personal contact with the student over the years.

The grandfather and the grandmother on the adult female's side have had (little, some, much) personal contact with the student over the years.

The usual occupation of the grandfather and the grandmother on the adult male's side is or has been  
\_\_\_\_\_ (male)  
\_\_\_\_\_ (female).

The usual occupation of the grandfather and the grandmother on the adult female's side is or has been  
\_\_\_\_\_ (male)  
\_\_\_\_\_ (female).

Highest school grade successfully completed by  
The adult male \_\_\_\_\_, his father \_\_\_\_\_, his mother \_\_\_\_\_.  
" " female \_\_\_\_\_, her " \_\_\_\_\_, her " \_\_\_\_\_.  
Student's older brother(s) \_\_\_\_\_.  
" " sister(s) \_\_\_\_\_.

Number of employers and/or number of different occupations and lengths of serious unemployment for the following in the past ten years:

	<u>Employers</u>	<u>Occupations</u>	<u>Unemployment</u>
Adult male			
Adult female	_____	_____	_____
Grandfather	_____	_____	_____
(adult male's side)			
Grandmother	_____	_____	_____
(adult male's side)			
Grandfather	_____	_____	_____
(adult female's side)			
Grandmother	_____	_____	_____
(adult female's side)	_____	_____	_____

Of those who live locally, who in the family has most often seen the student play in a school-sponsored athletic contest?

Of those who live locally, who in the family has seen the student least or not at all in a school-sponsored athletic contest?

From whom in the family has the student gotten most of his athletic interest and ability?

What have been some of the student's major problems or handicaps that he has had to try to overcome or live with in the past few years?

What have been some of the student's unusual or outstanding qualities which have worked in his favor in the past few years?

What would you as parents or guardians have done differently with regard to the student if you had it all to live over again?

What are some of the things you as parents or guardians are particularly glad you stressed or instilled in the boy over the years?

## APPENDIX B

TABLE 8

SCALES FOR MAKING PRIMARY RATINGS OF  
FOUR STATUS CHARACTERISTICS<sup>a, b</sup>

Status Characteristic and Rating	Definitions	Status Characteristic and Rating	Definitions
<u>Occupation: Original Scale</u>			
1. Professionals and proprietors of large businesses		4. Average houses	
2. Semi-professionals and smaller officials of large businesses		5. Fair houses	
3. Clerks and kindred workers		6. Poor houses	
4. Skilled workers		7. Very poor houses	
5. Proprietors of small businesses		<u>Dwelling Area</u>	
6. Semi-skilled workers		1. Very high; Gold Coast, North Shore, etc.	
7. Unskilled workers		2. High; the better suburbs and apartment house areas, houses with spacious yards, etc.	
<u>Source of Income</u>		3. Above average; areas all residential, larger than average space around houses; apartment areas in good condition, etc.	
1. Inherited wealth		4. Average; residential neighborhoods, no deterioration in the area	
2. Earned wealth		5. Below average; area not quite holding its own, beginning to deteriorate, business entering, etc.	
3. Profits and fees		6. Low; considerably deteriorated, run-down and semi-slum	
4. Salary		7. Very low; slum	
5. Wages			
6. Private relief			
7. Public relief and non-respectable income			
<u>House Type: Revised Scale</u>			
1. Excellent houses			
2. Very good houses			
3. Good houses			

<sup>a</sup>More extended descriptions of these categories and qualifications as to their use accompanied these scales and were studied before actual ratings of these characteristics were undertaken.

<sup>b</sup>Warner, Social Class in America, op. cit., p. 123.  
(Table reprinted with author's permission.)

## APPENDIX C

TABLE 9  
WEIGHTS FOR COMPUTATION OF I.S.C.<sup>a</sup>

Status Characteristic	Weights to be Used if All Ratings Available	Weights to be Used if Ratings on One Characteristic Missing			
		Occupation Missing	Source of Income Missing	House Type Missing	Dwell- ing Area Missing
Occupation	4	-	5	5	5
Source of Income	3	5	-	4	4
House Type	3	4	4	-	3
Dwelling Area	2	3	3	3	-

<sup>a</sup>Warner, Social Class in America, op. cit., p. 124.  
(Table reprinted with author's permission.)

## APPENDIX D

TABLE 10

I.S.C. MEAN OF E<sub>1</sub> MALE STUDENTS BY  
SCHOOL AND SCHOOL GRADE BY  
SCHOOL YEAR<sup>a</sup>

	School Year	Grade(s)	I.S.C. Mean	Number (N)
Jr. High <sup>b</sup>	1959-60	7th, 8th, 9th	58.46	202
" "	1960-61	" " "	57.29	191
" "	1961-62	" " "	55.99	218
" "	1962-63	" " "	55.51	250
Sr. High <sup>c</sup>	1959-60	---	---	---
" "	1960-61	10th	54.02	35
" "	1961-62	10th, 11th	55.24	65
" "	1962-63	10th, 11th, 12th	53.86	99
Jr. High <sup>d</sup>	1959-60	7th	59.08	83
" "	1960-61	8th	55.80	60
" "	1961-62	9th	54.65	63
Sr. "	1962-63	10th	52.87	47
Jr. High <sup>d</sup>	1959-60	8th	59.01	67
" "	1960-61	9th	57.38	52
Sr. "	1961-62	10th	56.45	33
" "	1962-63	11th	55.81	27
Jr. High <sup>d</sup>	1959-60	9th	56.75	52
Sr. "	1960-61	10th	54.02	35
" "	1961-62	11th	53.96	32
" "	1962-63	12th	53.64	25
Jr. High <sup>d</sup>	1960-61	7th	58.36	79
" "	1961-62	8th	56.99	78
" "	1962-63	9th	55.15	69
Jr. High	1961-62	7th	56.16	77
" "	1962-63	8th	55.10	73
Jr. High	1962-63	7th	56.	108

<sup>a</sup>The number (N) of male students in either school and any school class can be decreased by dropout or moving away and can be increased in junior high school by new E<sub>1</sub>'s moving into the school district.

<sup>b</sup>Note rise in the over-all social position each year at the junior high (a condition borne out by observed increased middle class residences building in the area).

<sup>c</sup>It should be remembered that figures for any senior high school grade include only E<sub>1</sub> males formerly of the junior high school of the study.

<sup>d</sup>Note rise in social mean in each school class with each grade advance.

## APPENDIX B

TABLE 11

OBSERVED AND EXPECTED ATHLETIC PARTICIPATION AND NON-PARTICIPATION IN THE SENIOR HIGH SCHOOL'S FOOTBALL, BASKETBALL, AND BASEBALL PROGRAMS BY SCHOOL YEAR AND BY ADJUSTED SOCIAL CLASS POSITIONS WITH RESULTING CHI SQUARE ( $\chi^2$ ) RATIOS<sup>a</sup>

	Cell		Frequency		Chi Square Ratio $\frac{(fo - fe)^2}{fe}$
			Observed	Expected	
			(fo)	(fe)	
1960-61	I.S.C.				
	Athletes				
	Middle class	(25-50)	2	1.286	.03571
	Lower class	(51-84)	3	3.714	.01236
	Non-athletes				
	Middle class	(25-50)	7	7.714	.00595
1961-62	Lower class	(51-84)	23	22.286	.00206
	Total		35	35.000	$\chi^2 = .05608 < .99$
	Athletes				
	Middle class	(25-50)	1	1.692	.02185
	Lower class	(51-84)	9	8.308	.00445
	Non-athletes				
1962-63	Middle class	(25-50)	10	9.308	.00397
	Lower class	(51-84)	45	45.692	.000809
	Total		65	65.000	$\chi^2 = .031079 < .99$
	Athletes				
	Middle class	(25-50)	2	3.677	.3765
	Lower class	(51-84)	12	10.323	.13412
1962-63	Non-athletes				
	Middle class	(25-50)	24	22.323	.06202
	Lower class	(51-84)	61	62.677	.02209
	Total		99	99.000	$\chi^2 = .59473 < .50$

<sup>a</sup>Correction factor employed (Cohen, op. cit., p. 127).

## BIBLIOGRAPHY

- Andrus, Joseph, A Sociometric Analysis of Group Structures and the Effect of Football Activities on Inter-personal Relationships. Doctoral dissertation. New York: New York University, 1953.
- Annarino, Anthony A., The Contribution of Athletics to Social Mobility. Master's thesis. Lafayette, Indiana: Purdue University, 1951.
- Biddulph, Lowell G., "Athletic Achievement and the Personal and Social Adjustment of High School Boys," Research Quarterly, XXV No.1 (March, 1954), 1-7.
- Bower, Philip A., The Relationship of Physical, Mental, and Personality Factors to Popularity in Adolescent Boys. Doctoral dissertation. Berkeley: University of California, 1941.
- Brace, David Kingsley, "Sociometric Evidence of the Relationship Between Social Status and Athletic Ability Among Junior High School Boys," Professional Contributions Number 3. Washington, D. C.: American Academy of Physical Education, 1954.
- Cohen, Lillian, Statistical Methods for Social Scientists. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1954.
- Culbertson, Jack, "Attendance," Encyclopedia of Educational Research, Third Edition (December, 1957), 92-102. New York: The Macmillan Company, 1960.
- Davis, Allison, Burleigh B. Gardner, and Mary R. Gardner, Deep South. Chicago: University of Chicago Press, 1941.
- Eells, Kenneth (with Allison Davis, chairman, Robert J. Havighurst, Virginia E. Herrick, Ralph W. Tyler), Intelligence and Cultural Differences. Chicago: University of Chicago Press, 1951.
- Fitzpatrick, William J., "Competitive Sports and Social Caste," Clearing House, XXXIV (May, 1960), 526-27.



- Flowtow, Ernest A., "Charting Social Relationships of School Children," The Elementary School Journal, XLVI (May, 1946), 498-504.
- Hale, Creighton J., "What Research Says About Athletics for Pre-high School Age Children," Journal of Health, Physical Education, and Recreation, XXX (December, 1959), 19-21.
- Hand, Harold C., "Do School Costs Drive Out the Youth of the Poor?" Progressive Education, XXVIII (January, 1951), 89-93.
- Havighurst, Robert J., and Bernice L. Neugarten, Society and Education, Second Edition. Boston: Allyn and Bacon, 1962.
- Hollingshead, August B., Elmtown's Youth: Impact of Social Classes on Adolescents. New York: John Wiley and Sons, 1949.
- Keogh, Jack, "Relationship of Motor Ability and Athletic Participation in Certain Standardized Personality Measures," Research Quarterly, XXX No.4 (December, 1959), 428-45.
- Kuhlen, Raymond G., and Howard Bretsch, "Sociometric Status and Personal Problems of Adolescents," Sociometry, X (May, 1947), 122-32.
- McCraw, L. W. and J. W. Tolbert, "Sociometric Status and Athletic Ability of Junior High School Boys," Research Quarterly, XXIV (March, 1953), 72-80.
- Mullin, Margaret M., "Personal and Situational Factors Associated with Perfect Attendance," Personnel and Guidance Journal, XXXIII (April, 1955), 438-43.
- Neugarten, Bernice L., "The Democracy of Childhood," Chapter 5 in Democracy in Jonesville, W. Lloyd Warner and Associates. New York: Harper & Brothers, 1949.
- Neugarten, Bernice L., "Social Class and Friendship Among School Children," American Journal of Sociology, LI No.4 (January, 1946), 305-313.
- Olsen, Elinar A., "Relationship Between Psychological Capacities and Success in College Athletics," Research Quarterly, XXVII No.1 (March, 1956), 79-89.

Pogue, Earl G., Participation in Extra-class Activities as Related to Socio-economic Classification. Doctoral dissertation. Champaign-Urbana, Illinois: University of Illinois, 1949.

Warner, W. Lloyd, Wilfrid C. Bailey, Arch Cooper, Walter Eaton, August B. Hollingshead, Carson McGuire, Marchia Meeker, Bernice Neugarten, Joseph Rosenstein, Evon Z. Vogt, Jr., and Donald Wray, Democracy in Jonesville. New York: Harper & Brothers, 1949.

Warner, W. Lloyd (with Marchia Meeker and Kenneth Eells), Social Class in America. New York: Harper & Brothers, 1960.

Warner, W. Lloyd, and Paul S. Lunt, The Social Life of a Modern Community, Vol. I, "Yankee City Series," New Haven: Yale University Press, 1941.

Florida Teacher's Register of Attendance. Tallahassee, Florida: State Board of Education, 1956.

U. S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook: Employment Information on Major Occupations for Use in Guidance, Bulletin No. 1300 (Revision of Bulletin 1255). Washington, D. C.: Government Printing Office, 1961.

## BIOGRAPHICAL SKETCH

William Francis HULLIHAN was born in Freeport, Illinois, July 22, 1927. He received his elementary and secondary education at Sacred Heart Catholic School in Boone, Iowa, and, after a period of military service, graduated in 1948 from Boone Junior College of that same city. In 1952 he received a Bachelor of Science degree in Physical Education from the University of Florida. From April, 1952, until June, 1953, he was a teacher of physical education in the public schools in Macon, Georgia. In June of 1954 he received a Master's degree in Physical Education from the University of Florida. From August, 1954, until June, 1955, he was a teacher of physical education in Palm Beach High School, West Palm Beach, Florida, and then took a similar position as an instructor in the College of Physical Education at the University of Florida in September of 1955. During the four summers from 1952 through 1955 he served as a senior counselor at a North Carolina boys' camp. In June of 1958 he began a year of full-time study in the Department of Educational Foundations in the College of Education at the University of Florida and served as a graduate assistant to that department for that year. From August of 1959 until June of 1964 he was a teacher of social studies and a coach

in the public schools of Palm Beach County, Florida. He worked as a playground director for the Palm Beach County schools' summer program in 1960, 1961, and 1962 and was a coordinator of that county's program in the summer of 1963. He was appointed Assistant Professor of Education at Florida Atlantic University in Boca Raton, Florida, in March of 1964, effective in September of that same year.

William Francis HULLIHAN is married to the former Estelle Jeanne Oldfather of Miami, Florida. They have three children -- a daughter, Lynn, and two sons, Patrick and Timothy.

This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of that committee. It was submitted to the Dean of the College of Education and to the Graduate Council, and was approved as partial fulfillment of the requirements for the degree of Doctor of Education.

August, 1964

M. C. Baker  
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